

**Micro Commercial Components** 



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# ESDLC5V0T7

## **Features**

- Halogen free available upon request by adding suffix "-HF"
- SOT-723 package
- Low clamping voltage
- Low leakage current
- Working voltage: 5V
- Protect up two data lines
- 110 watts peak pulse power(tp=8/20us)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

# **Maximum Ratings**

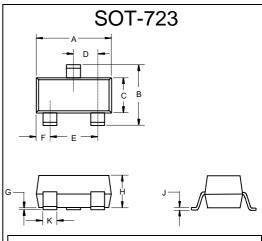
Operating Junction &StorageTemperature: -55°C to +150°C

Parameter	Symbol	Limits	unit	
IEC61000-4-2(ESD)	Air		±15	ΚV
	Contact		±8	٨V
ESD Voltage per human body mode			16	K۷
Peak Pulse Power (t <sub>p</sub> =8/20µS)		Ppp	110	W
Peak Pulse Current (t <sub>p</sub> =8/20µS)		$I_{pp}$	5.5	Α

## **Pin Configuration-Top View**



# 5V Low Capacitance ESD Protection Device



	INCHES		ММ		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	. 043	.051	1.10	1.30	
В	. 043	.051	1.10	1.30	
С	. 0 30	.033	0.75	0.85	
D	.014	.017	0.36	0.44	
Е	.028	.034	0.72	0.88	
F	.008	.023	0.22	0.58	
D	.0005	.0039	.013	.100	
Н	.019	.021	0.47	0.53	
٦	.003	.005	.075	.130	
K	.011	.014	0.29	0.35	



### **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Stand-off Voltage	V <sub>RWM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>t</sub> = 1mA	5.6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V			1	μA
Clamping Voltage	Vc	$I_{PP} = 1A$ , $t_P = 8/20 \mu s$ pin1 to pin2			13.5	V
Clamping Voltage	Vc	I <sub>PP</sub> = 5A, t <sub>P</sub> = 8/20µs pin1to pin2			23.0	V
Clamping Voltage	V <sub>C</sub>	$I_{PP}$ = 5A, $t_P$ = 8/20 $\mu$ s pin1or pin2 to pin3			20.0	V
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V, f = 1MHz Pin1 to Pin2		1.4	2	pF
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V f = 1MHz pin1or pin2 to pin3		2.8	3.5	pF

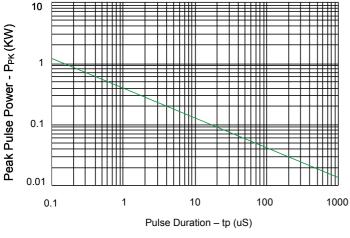
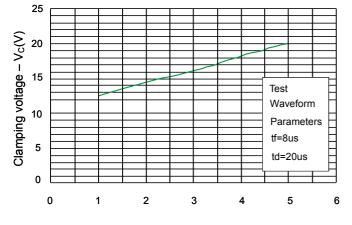


Fig1.Non-Repetitive Peak Pulse Power vs. Pulse time

Fig2. Power Derating Curve



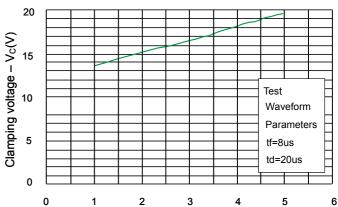


Fig 3.Clamping Voltage vs. peak Pulse Current (Pin 1 to Pin 2)

Fig.4 Clamping Voltage vs. peak Pulse Current (Pin 1 or Pin 2 to Pin 3)

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## **Ordering Information:**

Device	Packing	
Part Number-TP	Tape&Reel: 10Kpcs/Reel	

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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